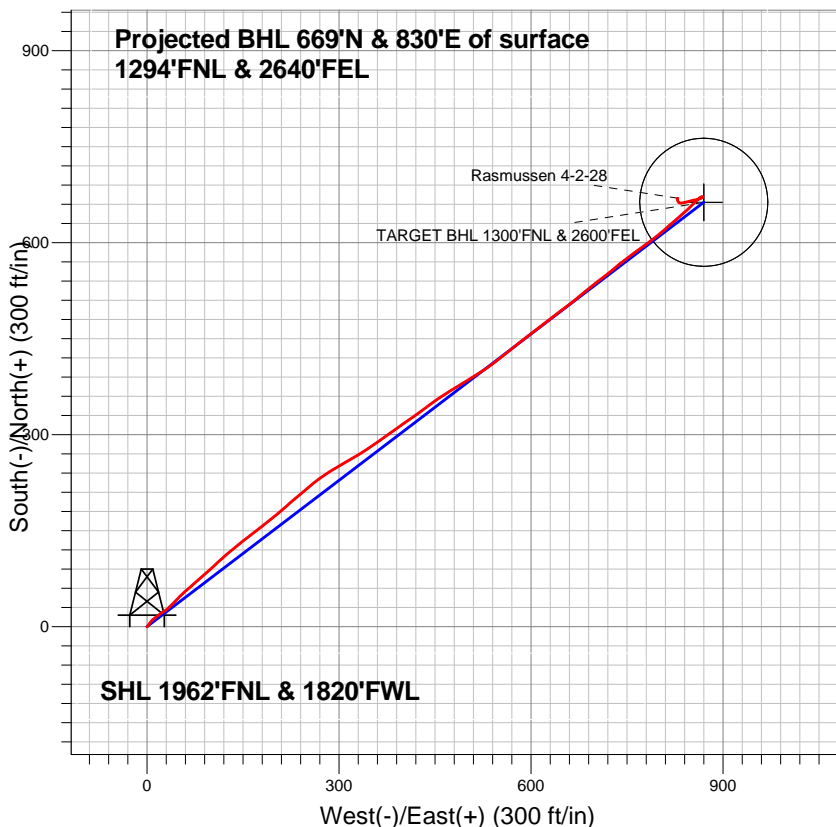


EnCana Oil & Gas Weld County CO



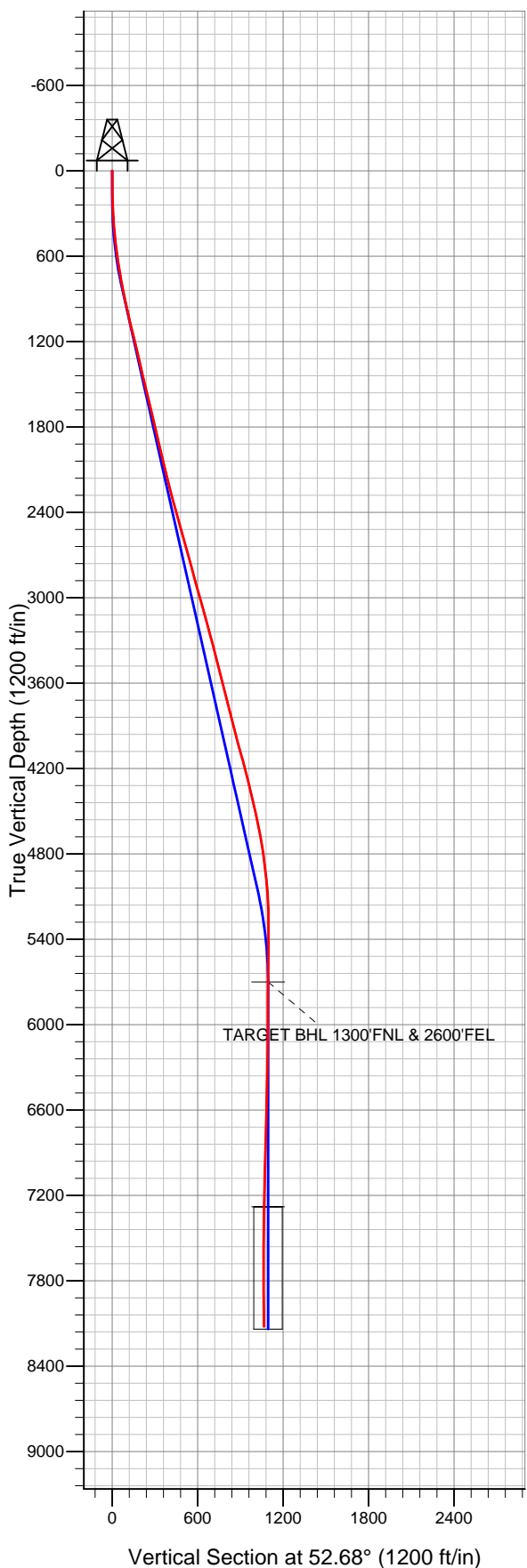
LEGEND

- ◆ Rasmussen 4-2-28, Wellbore #1, Plan #1 (2-19-13) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
8250'MD & 8120'TVD @ 1066'VS
0.9 deg Inc 41.10 deg AZ

Project: SEC.28-T2N-R68W
Site: Rasmussen 4-4-28 Pad Sec.28-T2N-R68W
Well: Rasmussen 4-2-28
Plan: Wellbore #1





Directional

EnCana Oil & Gas Weld County CO

SEC.28-T2N-R68W

Rasmussen 4-4-28 Pad Sec.28-T2N-R68W

Rasmussen 4-2-28

Wellbore #1

Survey: Survey #1

Standard Survey Report

05 March, 2013

Survey	Wellbore Data									
	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Main Wellbore	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	106.0	0.50	45.30	106.0	0.3	0.3	0.5	0.47	0.47	0.00
	166.0	1.10	43.00	166.0	0.9	0.9	1.3	1.00	1.00	-3.83
	226.0	2.20	36.50	226.0	2.3	2.0	3.0	1.86	1.83	-10.83
	286.0	3.30	34.60	285.9	4.6	3.7	5.7	1.84	1.83	-3.17
	344.0	4.00	38.80	343.8	7.6	5.9	9.3	1.29	1.21	7.24
	404.0	4.70	45.30	403.6	10.9	8.9	13.7	1.43	1.17	10.83
	465.0	5.50	53.40	464.4	14.4	13.0	19.1	1.76	1.31	13.28
	526.0	6.50	53.90	525.0	18.2	18.2	25.5	1.64	1.64	0.82
	586.0	7.70	56.40	584.6	22.4	24.3	32.9	2.06	2.00	4.17
	647.0	9.10	50.90	644.9	27.7	31.4	41.8	2.64	2.30	-9.02
	708.0	9.80	45.50	705.1	34.4	38.9	51.8	1.85	1.15	-8.85
	770.0	10.40	43.90	766.1	42.2	46.5	62.5	1.07	0.97	-2.58

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Rasmussen 4-2-28
Project:	SEC.28-T2N-R68W	TVD Reference:	WELL @ 4948.0ft (Original Well Elev)
Site:	Rasmussen 4-4-28 Pad Sec.28-T2N-R68W	MD Reference:	WELL @ 4948.0ft (Original Well Elev)
Well:	Rasmussen 4-2-28	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
795.0	10.60	44.10	790.7	45.4	49.7	67.1	0.81	0.80	0.80	
850.0	10.80	45.00	844.8	52.7	56.8	77.2	0.47	0.36	1.64	
872.0	11.40	50.80	866.3	55.5	60.0	81.4	5.76	2.73	26.36	
958.0	12.50	48.10	950.5	67.1	73.5	99.2	1.43	1.28	-3.14	
1,043.0	13.70	47.60	1,033.3	80.1	87.8	118.3	1.42	1.41	-0.59	
1,129.0	13.20	49.70	1,116.9	93.3	102.8	138.3	0.81	-0.58	2.44	
1,215.0	13.60	46.70	1,200.6	106.6	117.6	158.2	0.93	0.47	-3.49	
1,301.0	13.20	49.90	1,284.2	119.8	132.5	178.0	0.98	-0.47	3.72	
1,386.0	13.20	51.80	1,367.0	132.1	147.6	197.4	0.51	0.00	2.24	
1,472.0	12.80	52.20	1,450.8	144.0	162.8	216.8	0.48	-0.47	0.47	
1,558.0	13.50	53.20	1,534.5	155.8	178.4	236.3	0.86	0.81	1.16	
1,644.0	13.50	51.30	1,618.1	168.1	194.2	256.4	0.52	0.00	-2.21	
1,729.0	13.90	48.50	1,700.7	181.1	209.6	276.5	0.91	0.47	-3.29	
1,815.0	13.50	49.20	1,784.3	194.5	225.0	296.8	0.50	-0.47	0.81	
1,901.0	13.10	49.70	1,868.0	207.4	240.0	316.6	0.48	-0.47	0.58	
1,986.0	12.70	49.90	1,950.8	219.6	254.5	335.5	0.47	-0.47	0.24	
2,072.0	13.40	53.40	2,034.6	231.6	269.7	354.9	1.23	0.81	4.07	
2,158.0	14.40	58.00	2,118.1	243.3	286.8	375.5	1.73	1.16	5.35	
2,244.0	14.10	61.10	2,201.4	254.0	305.0	396.6	0.95	-0.35	3.60	
2,329.0	14.60	58.70	2,283.8	264.6	323.3	417.5	0.91	0.59	-2.82	
2,415.0	15.90	57.40	2,366.8	276.5	342.4	440.0	1.56	1.51	-1.51	
2,501.0	15.70	55.10	2,449.5	289.5	361.9	463.3	0.76	-0.23	-2.67	
2,587.0	15.90	53.70	2,532.3	303.2	380.9	486.7	0.50	0.23	-1.63	
2,672.0	14.80	56.00	2,614.2	316.1	399.3	509.2	1.48	-1.29	2.71	
2,758.0	15.40	54.30	2,697.3	328.9	417.7	531.6	0.87	0.70	-1.98	
2,844.0	16.10	52.00	2,780.0	342.9	436.4	554.9	1.09	0.81	-2.67	
2,929.0	14.50	57.30	2,862.0	355.9	454.6	577.3	2.50	-1.88	6.24	
3,015.0	15.80	57.40	2,945.0	368.1	473.5	599.7	1.51	1.51	0.12	
3,101.0	16.10	59.20	3,027.7	380.5	493.7	623.3	0.67	0.35	2.09	
3,187.0	15.40	57.30	3,110.5	392.8	513.5	646.5	1.01	-0.81	-2.21	
3,272.0	14.90	55.00	3,192.5	405.1	532.0	668.7	0.92	-0.59	-2.71	
3,358.0	15.70	52.70	3,275.5	418.5	550.3	691.3	1.17	0.93	-2.67	
3,444.0	14.60	50.40	3,358.5	432.5	567.9	713.8	1.46	-1.28	-2.67	
3,530.0	14.20	52.70	3,441.8	445.8	584.6	735.2	0.81	-0.47	2.67	
3,615.0	14.10	50.90	3,524.2	458.6	600.9	756.0	0.53	-0.12	-2.12	
3,701.0	13.70	52.70	3,607.7	471.4	617.2	776.6	0.68	-0.47	2.09	
3,787.0	14.20	52.90	3,691.2	483.9	633.7	797.3	0.58	0.58	0.23	
3,873.0	14.20	54.30	3,774.5	496.5	650.7	818.4	0.40	0.00	1.63	
3,958.0	14.30	50.00	3,856.9	509.3	667.2	839.3	1.25	0.12	-5.06	
4,044.0	14.80	50.90	3,940.2	523.0	683.8	860.9	0.64	0.58	1.05	
4,130.0	15.30	51.30	4,023.2	537.1	701.2	883.3	0.59	0.58	0.47	
4,215.0	15.90	52.90	4,105.1	551.1	719.3	906.1	0.87	0.71	1.88	
4,301.0	14.70	49.30	4,188.0	565.3	736.9	928.8	1.78	-1.40	-4.19	
4,387.0	13.70	54.40	4,271.4	578.4	753.5	949.9	1.86	-1.16	5.93	
4,473.0	12.80	53.90	4,355.1	589.9	769.5	969.6	1.05	-1.05	-0.58	
4,558.0	13.40	53.20	4,437.9	601.4	785.0	988.8	0.73	0.71	-0.82	
4,644.0	13.00	51.10	4,521.6	613.4	800.5	1,008.5	0.73	-0.47	-2.44	
4,730.0	11.80	48.60	4,605.6	625.3	814.6	1,026.9	1.53	-1.40	-2.91	
4,816.0	9.90	48.60	4,690.1	636.0	826.7	1,043.0	2.21	-2.21	0.00	
4,901.0	8.30	48.60	4,774.0	644.9	836.8	1,056.5	1.88	-1.88	0.00	
4,987.0	7.10	46.00	4,859.2	652.7	845.3	1,067.9	1.45	-1.40	-3.02	
5,073.0	6.40	45.10	4,944.6	659.8	852.5	1,078.0	0.82	-0.81	-1.05	
5,159.0	5.00	46.40	5,030.2	665.7	858.6	1,086.4	1.63	-1.63	1.51	
5,244.0	3.30	50.80	5,115.0	669.8	863.2	1,092.6	2.03	-2.00	5.18	

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,330.0	1.40	83.30	5,200.9	671.5	866.2	1,095.9	2.61	-2.21	37.79
5,416.0	1.00	86.40	5,286.9	671.7	868.0	1,097.5	0.47	-0.47	3.60
5,587.0	1.10	236.60	5,457.9	670.9	868.1	1,097.1	1.19	0.06	87.84
5,759.0	1.00	237.80	5,629.9	669.2	865.4	1,093.9	0.06	-0.06	0.70
5,829.1	0.52	242.60	5,700.0	668.7	864.6	1,093.0	0.69	-0.68	6.85
TARGET BHL 1300'FNL & 2600'FEL									
5,930.0	0.20	25.60	5,800.9	668.6	864.3	1,092.7	0.69	-0.32	141.76
6,102.0	0.40	278.90	5,972.9	669.0	863.8	1,092.6	0.29	0.12	-62.04
6,273.0	1.00	237.60	6,143.8	668.3	862.0	1,090.7	0.44	0.35	-24.15
6,445.0	1.00	260.60	6,315.8	667.3	859.2	1,087.8	0.23	0.00	13.37
6,616.0	1.10	263.30	6,486.8	666.8	856.1	1,085.1	0.07	0.06	1.58
6,787.0	1.20	256.90	6,657.7	666.2	852.8	1,082.1	0.10	0.06	-3.74
6,959.0	1.70	252.70	6,829.7	665.1	848.6	1,078.0	0.30	0.29	-2.44
7,130.0	2.10	257.10	7,000.6	663.6	843.1	1,072.8	0.25	0.23	2.57
7,302.0	1.80	255.00	7,172.5	662.2	837.4	1,067.4	0.18	-0.17	-1.22
7,407.7	1.34	265.84	7,278.1	661.7	834.6	1,064.8	0.51	-0.43	10.25
TARGET CIRCLE 1300'FNL & 2600'FEL									
7,473.0	1.10	276.80	7,343.4	661.7	833.2	1,063.8	0.51	-0.37	16.78
7,645.0	0.80	313.70	7,515.4	662.7	830.7	1,062.4	0.39	-0.17	21.45
7,816.0	0.80	342.00	7,686.4	664.7	829.4	1,062.6	0.23	0.00	16.55
7,988.0	0.80	341.10	7,858.4	667.0	828.7	1,063.4	0.01	0.00	-0.52
8,159.0	0.40	12.80	8,029.4	668.7	828.4	1,064.2	0.30	-0.23	18.54
8,207.0	0.90	41.10	8,077.4	669.1	828.7	1,064.7	1.21	1.04	58.96
8,250.0	0.90	41.10	8,120.4	669.6	829.2	1,065.4	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____